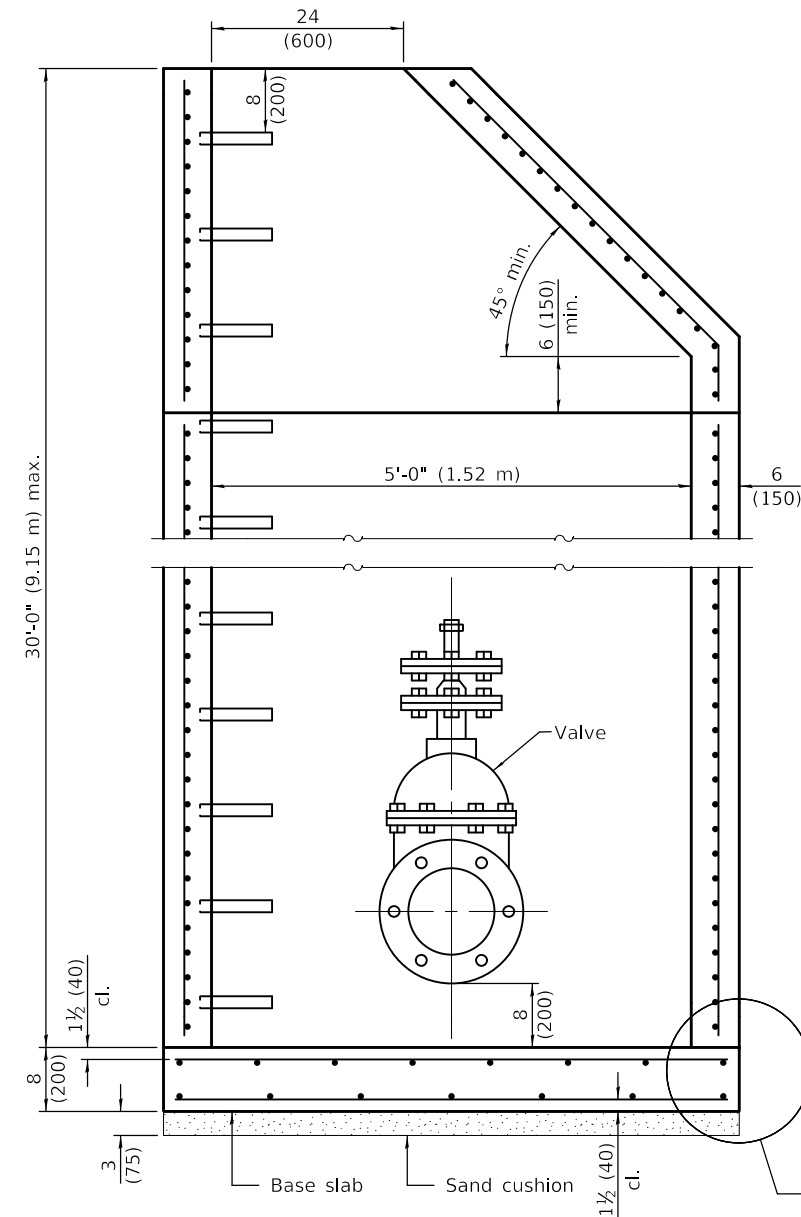
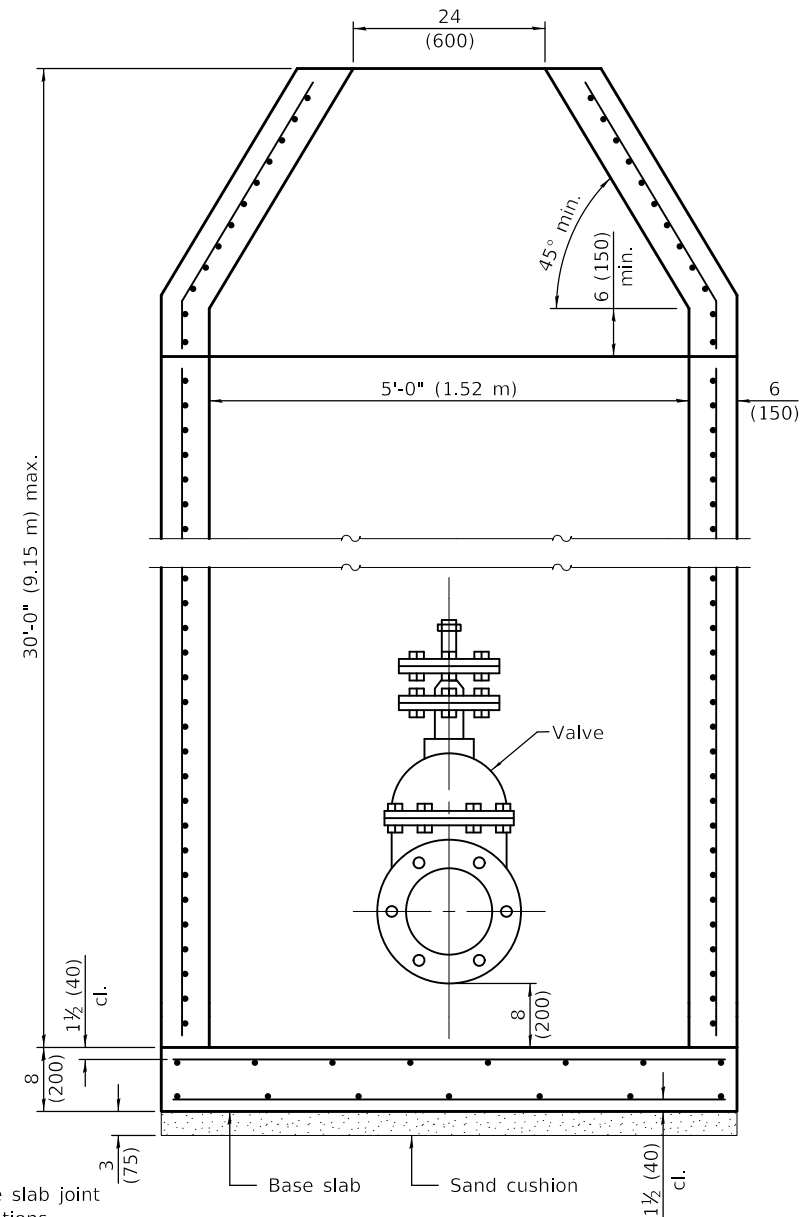


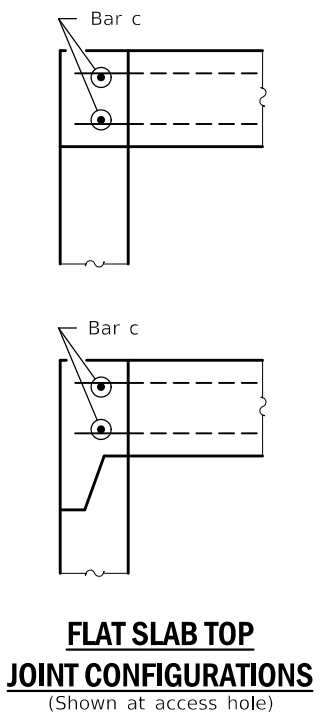
**SECTION THRU VALVE VAULT**  
(Without conical top)



**SECTION THRU VALVE VAULT**  
(With conical top)



**SECTION THRU VALVE VAULT**  
(With concentric conical top)



**GENERAL NOTES**


Use this standard for water mains  $\geq 10$  (250).

The manufacturer shall ensure that all precast manhole sections are additionally reinforced where required to resist damage from handling, shipping and installation stresses.

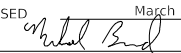
Lifting holes shall be located in the sections as per the manufacturer's recommendations, except as noted.

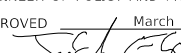
See Standard 602701 for details of manhole steps.

All dimensions are in inches (millimeters) unless otherwise noted.



Illinois Department of Transportation

PASSED  
  
ENGINEER OF POLICY AND PROCEDURES

APPROVED  
  
ENGINEER OF DESIGN AND ENVIRONMENT

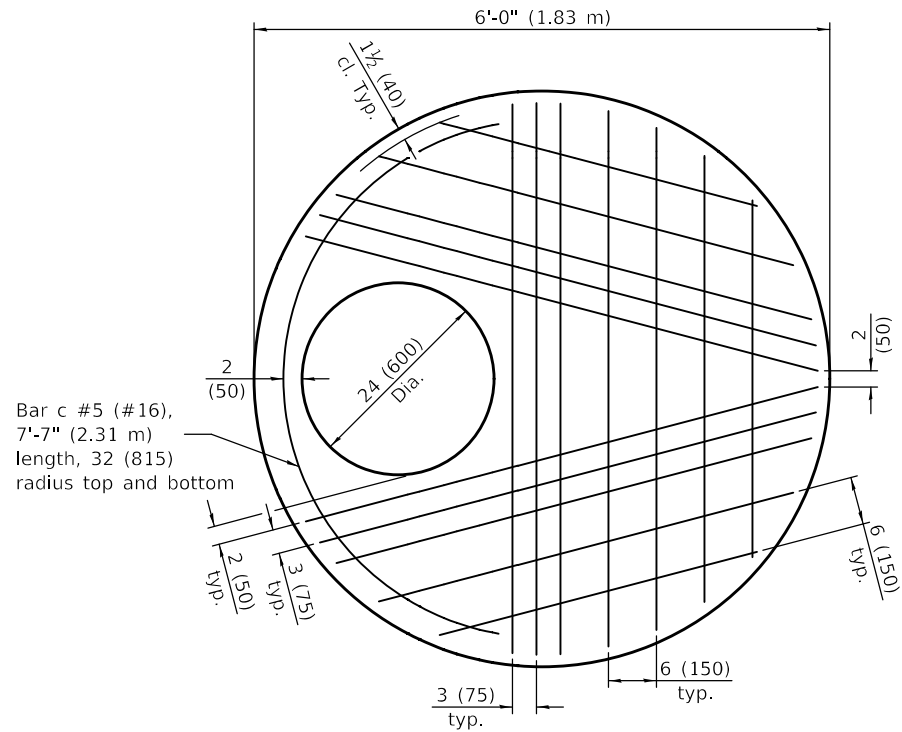
MARCH 1, 2019

81-1-18

DATE	REVISIONS
3-1-19	Moved wall reinforcement from inside face to middle.
1-1-19	Expanded / refined reinforcement options. Increased vault depths.

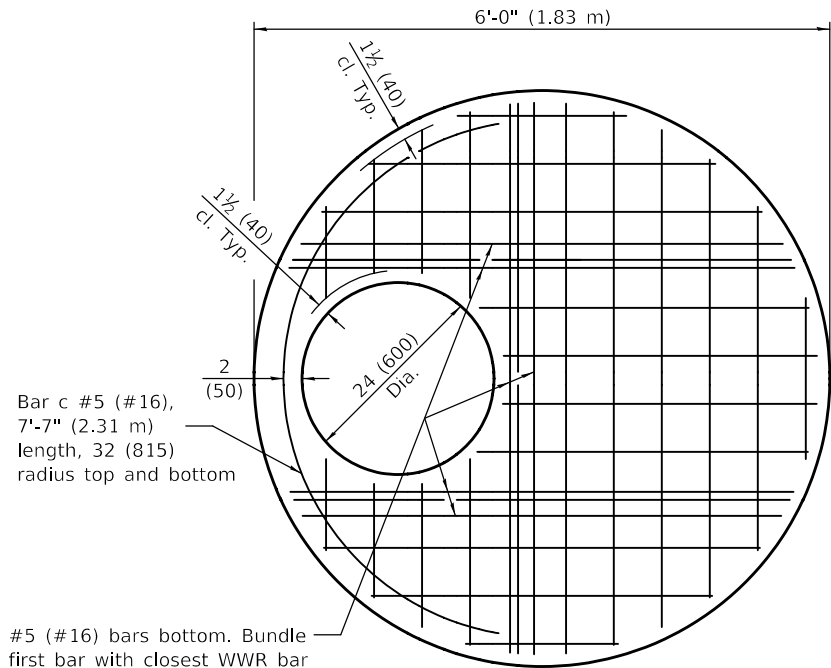
**PRECAST VALVE VAULT TYPE A**  
**5' (1.52 m) DIAMETER**  
(Sheet 1 of 2)

**STANDARD 602506-02**



**PLAN - FLAT SLAB TOP**

(Showing layout of bottom reinforcement bars and c bars)



**PLAN - FLAT SLAB TOP**

(Showing layout of welded wire reinforcement and c bars)

**FLAT SLAB TOP REINFORCEMENT**

Location	WWR (each direction)		Rebar (each direction except as noted)		
	A <sub>s</sub> (min.)	Spacing (max.)	A <sub>s</sub> (min.)	Spacing (max.)	Bar Size
Top Mat	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)	#3 or #4 (#10) (#13)
Bottom Mat	* 0.40 sq. in./ft. (847 sq. mm/m)	6 (150)	See plan view for rebar orientation and spacing and this table for bar size		#4 (#13)

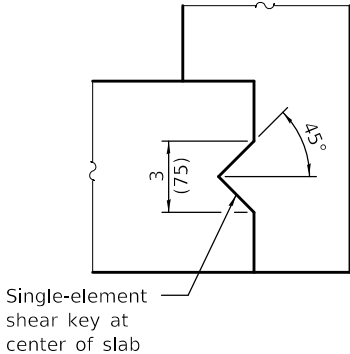
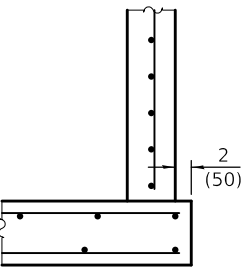
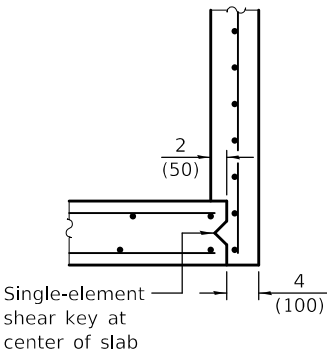
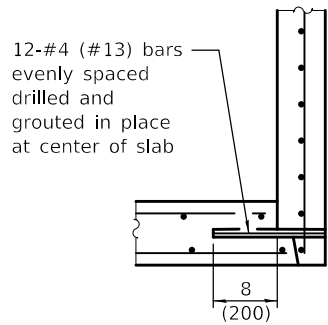
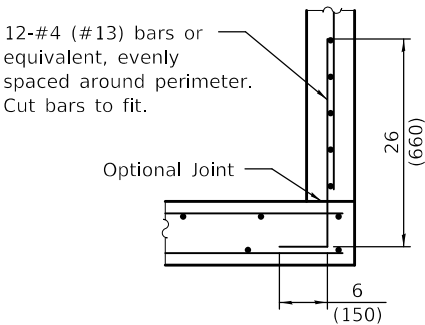
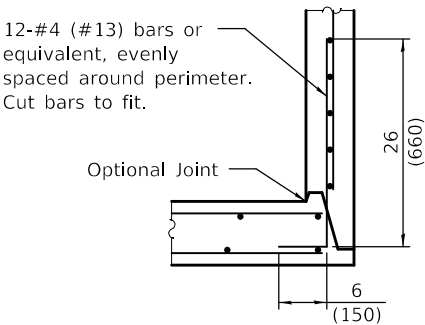
\* Only one layer of WWR permitted to avoid congestion.

**WALL REINFORCEMENT**

Orientation	WWR or Rebar	
	A <sub>s</sub> (min.)	Spacing (max.)
Circumferential	0.15 sq. in./ft. (318 sq. mm/m)	6 (150)
Vertical	0.045 sq. in./ft. (95 sq. mm/m)	8 (200)

**BASE SLAB REINFORCEMENT**

Location	Total Height	WWR or Rebar (each direction)	
		A <sub>s</sub> (min.)	Spacing (max.)
Top Mat	≤ 20 ft. (6.10 m)	0.24 sq. in./ft. (508 sq. mm/m)	10 (250)
	> 20 ft. (6.10 m)	0.28 sq. in./ft. (593 sq. mm/m)	8 (200)
Bottom Mat	All	0.11 sq. in./ft. (233 sq. mm/m)	18 (450)



**SHEAR KEY GEOMETRY**

(Reinforcement not shown for clarity)

**BASE SLAB JOINT CONFIGURATIONS**

**PRECAST VALVE VAULT TYPE A**  
**5' (1.52 m) DIAMETER**

(Sheet 2 of 2)

**STANDARD 602506-02**